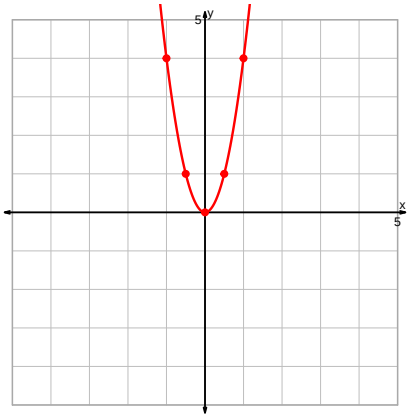
NAME: DATE:

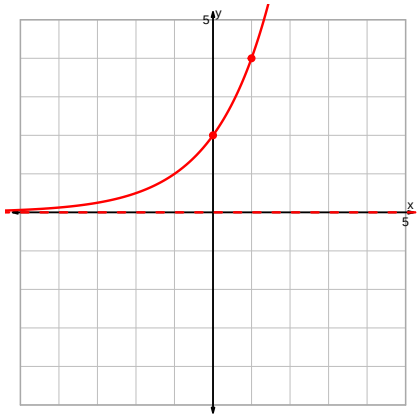
Unit-2 Reduced Mastery Assessment (version 315)

Question 1 (20 points)

Graph the equations accurately. For each integer-integer point on the parent, indicate the corresponding point precisely. Also, with dashed lines, indicate any asymptotes.

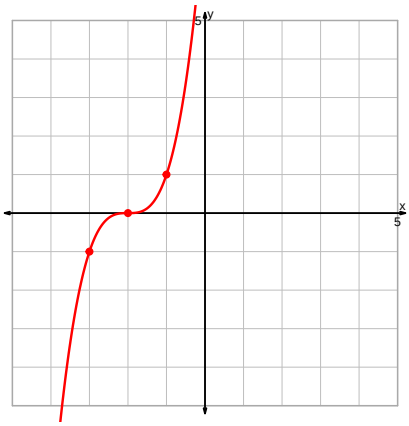
$y = (2x)^2$

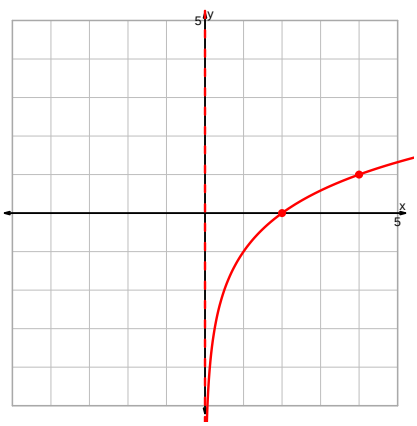




$y = 2 \cdot 2^x$

$y = (x+2)^3$

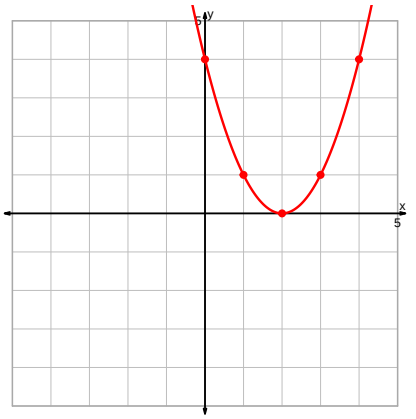


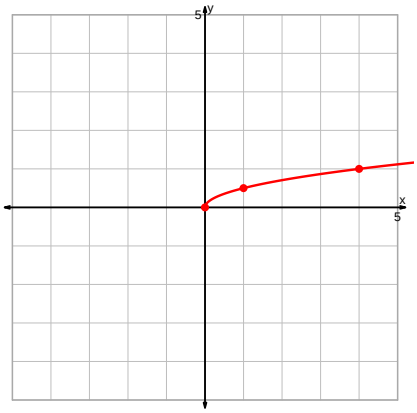


$y = \log_2\left(\frac{x}{2}\right)$

Question 2 continued. . .

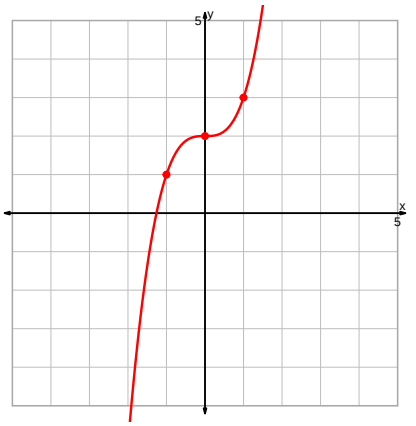
$y = (x-2)^2$

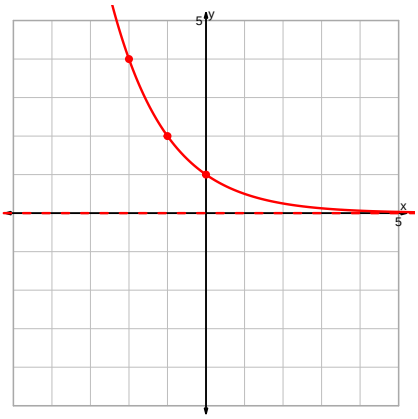




$y = \frac{\sqrt{x}}{2}$

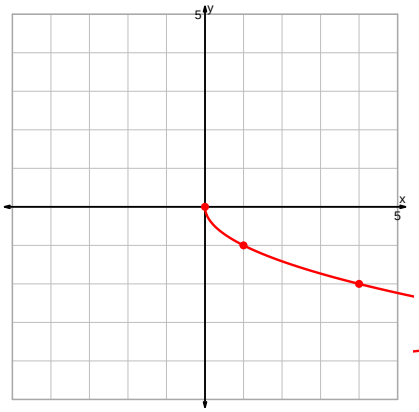
$y = x^3 + 2$

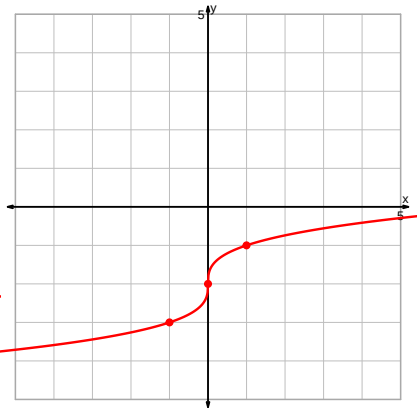




$y = 2^{-x}$

$y = -\sqrt{x}$

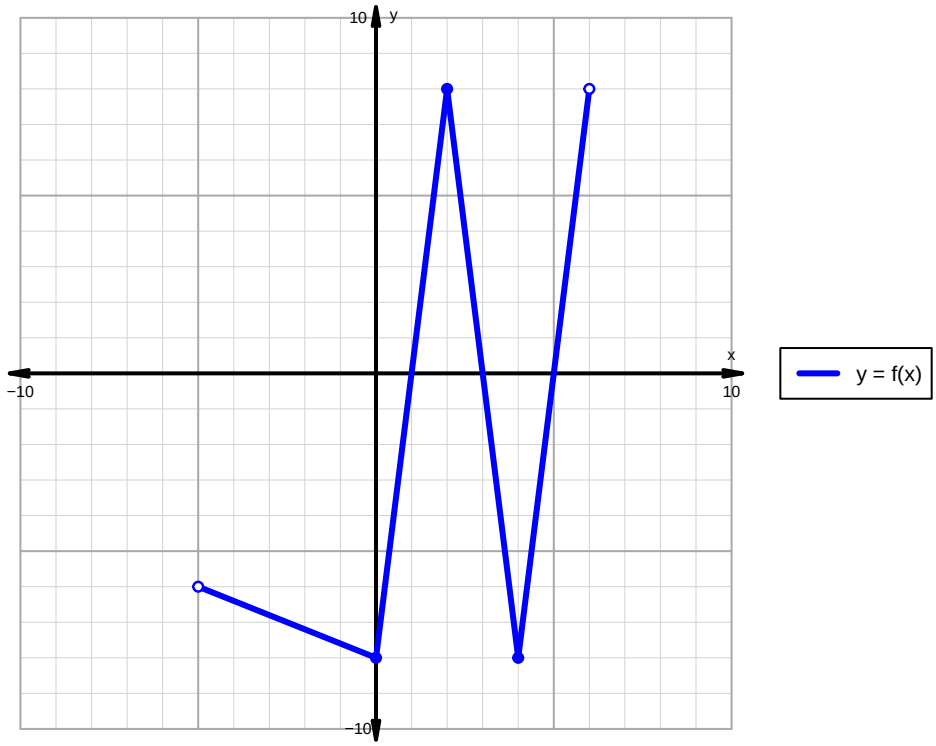




$y = \sqrt[3]{x} - 2$

Question 2 (20 points)

A function is graphed below.



Indicate the following intervals using interval notation.

Feature	Where
Positive	$(1, 3) \cup (5, 6)$
Negative	$(-5, 1) \cup (3, 5)$
Increasing	$(0, 2) \cup (4, 6)$
Decreasing	$(-5, 0) \cup (2, 4)$
Domain	$(-5, 6)$
Range	$(-8, 8)$